BA Assignment 1

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```
#1 Installed the ISLR library using the command install.packages(ISLR)
#install.packages(ISLR)
```

```
#2 Calling the ISLR library , summary of carseats and finding the no of rows
library(ISLR)
summary(Carseats)
```

```
##      Sales          CompPrice        Income        Advertising
##  Min.   : 0.000   Min.   : 77    Min.   : 21.00   Min.   : 0.000
##  1st Qu.: 5.390   1st Qu.:115    1st Qu.: 42.75   1st Qu.: 0.000
##  Median : 7.490   Median :125    Median : 69.00   Median : 5.000
##  Mean   : 7.496   Mean   :125    Mean   : 68.66   Mean   : 6.635
##  3rd Qu.: 9.320   3rd Qu.:135    3rd Qu.: 91.00   3rd Qu.:12.000
##  Max.   :16.270   Max.   :175    Max.   :120.00   Max.   :29.000
##    Population        Price         ShelveLoc       Age           Education
##  Min.   : 10.0    Min.   : 24.0   Bad   : 96   Min.   :25.00   Min.   :10.0
##  1st Qu.:139.0    1st Qu.:100.0   Good  : 85   1st Qu.:39.75   1st Qu.:12.0
##  Median :272.0    Median :117.0   Medium:219   Median :54.50   Median :14.0
##  Mean   :264.8    Mean   :115.8                Mean   :53.32   Mean   :13.9
##  3rd Qu.:398.5    3rd Qu.:131.0                3rd Qu.:66.00   3rd Qu.:16.0
##  Max.   :509.0    Max.   :191.0                Max.   :80.00   Max.   :18.0
##  Urban         US
##  No :118    No :142
##  Yes:282    Yes:258
##
##
##
##
```

```
nrow(Carseats)
```

```
## [1] 400
```

```
#There are 400 rows in the following dataset
```

```
#3 Finding the maximum value of advertising attribute
max(Carseats$Advertising)
```
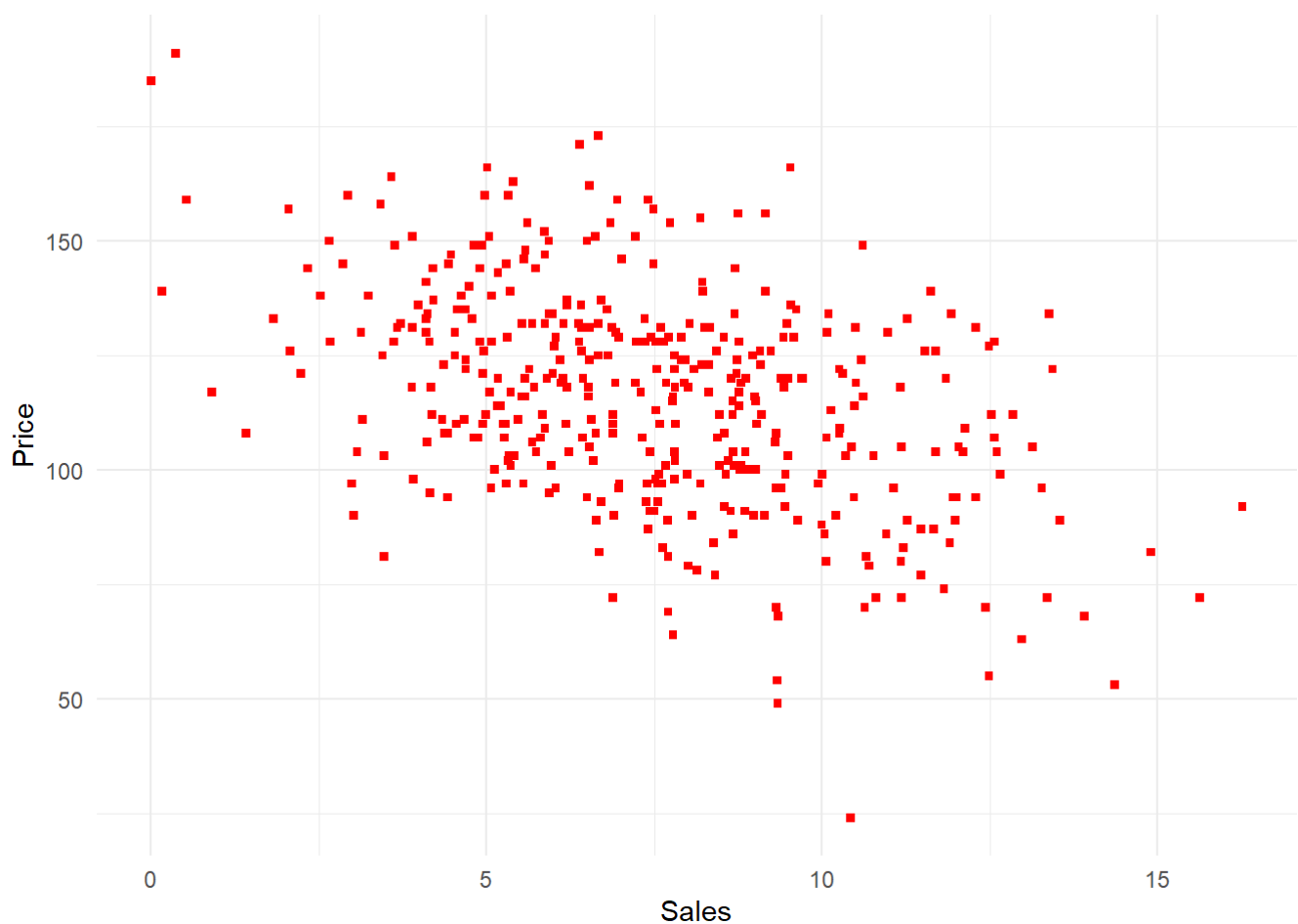
```
## [1] 29
```

```
# 29 is the maximum value in the advetising attribute
```

```
#4 Finding the IQR value of price attribute
IQR(Carseats$Price)
```

```
## [1] 31
```

```
#The IQR of price attribute is 31
```

```
#5 Plotting the sales over price and finding the correlation
library(ggplot2)
ggplot(Carseats)+
  aes(
    x=Sales,
    y=Price
  )+
  geom_point(shape="square",size=1.2,colour="red")+
  theme_minimal()
```



```
#There is negative correlation between the price of the carseats and the no of units sold, wh
ich suggest that customers are more likely to purchase lower priced carseats
```